

CLAIMS

We claim:

1. A method for updating objects contained within a web page, comprising:
displaying a web page;
5 creating a frame having a height of zero and a width of zero within the web page;
displaying outside the frame at least one updateable object within the web page;
configuring the frame to periodically request updated data from a server, the updated data
comprising an instruction set for causing the frame to update the at least one updateable object;
and

10 configuring the frame, in response to receiving the updated data, to cause the at least one
updateable object to be updated.

2. The method of claim 1, wherein the at least one updateable object is an HTML
element.

15 3. The method of claim 1, further comprising:
configuring the frame to request the updated data from the server in response to a timer
reaching a threshold value.

20 4. The method of claim 1, wherein the instruction set comprises a Script that is
executable by the frame without user interaction.

25 5. The method of claim 1, wherein causing the at least one updateable object to be
updated comprises interacting with an external Script running within the webpage external to the
frame in order to cause the external Script to modify the updateable object without refreshing the
web page.

6. A computer-readable medium having stored thereon computer-executable
instructions for performing the method of claim 5.

30 7. The method of claim 1, wherein the updated data is generated by a Java servlet
executed by the server.

8. A method for displaying on a webpage dynamically changing conditions within a building HVAC system, comprising:

receiving from a sensor an indication of a first state of a condition within the building HVAC system;

transmitting to a web browser executed by a client device a webpage including an invisible frame and an updateable object, the updateable object displaying the first state of the condition within the building HVAC system;

receiving from the sensor an indication of a second state of the condition within the building HVAC system;

in response to receiving the indication of the second state of the condition, generating an instruction set for instructing the invisible frame to cause the updateable object to display the second state of the condition without refreshing the webpage; and

in response to a request for updated data from the invisible frame, transmitting the instruction set to the invisible frame for execution thereof.

9. The method of claim 8, wherein the invisible frame comprises an HTML element with a height attribute and a width attribute each set to a value of zero.

10. The method of claim 8, wherein the instruction set comprises a Script that is executable by the invisible frame without user interaction.

11. The method of claim 8, wherein the instruction set instructs the invisible frame to interact with an external Script running within the webpage external to the frame in order to cause the external Script to modify the updateable object without refreshing the web page.

12. A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 11

13. The method of claim 8, wherein the condition is selected from the group consisting of time, temperature, airflow and damper position.

14. A computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 8.

15. A propagated signal set for updating an updateable object contained within a webpage, comprising:

5 a first signal transmitted from a server-side application executed by a server to a web browser executed by a client, the first signal comprising code that is interpreted by the web browser to display a web page comprising a frame having a height and width of zero and an updateable object; and

10 a second signal transmitted from the server to the client in response to a request from the frame, the second signal comprising an instruction set that is executed by the frame to cause the updateable object to be updated while not otherwise refreshing the webpage.

16. A system for updating objects contained within a web page, comprising:

a communications device for receiving a webpage data file and updated data from at least one server;

a processor coupled to the communications device for executing a web browser, the web browser for requesting, receiving and interpreting the webpage data file, the webpage data file comprising computer-executable instructions for:

creating a webpage,

creating a frame having a height of zero and a width of zero within the web page,

displaying outside the frame at least one updateable object within the web page,

configuring the frame to periodically request the updated data from the server, the updated data comprising an instruction set for causing the frame to update the at least one updateable object, and

configuring the frame, in response to receiving the updated data, to cause the at least one updateable object to be updated; and

a display device coupled to the processor for displaying the web page created by the web browser.

17. The system of claim 16, wherein the webpage data file further comprises computer-executable instructions for configuring the frame to request the updated data from the server in response to a timer reaching a threshold value.

18. The system of claim 16, wherein the instruction set comprises a Script that is executable by the frame without user interaction.

19. The system of claim 16, wherein causing the at least one updateable object to be updated comprises interacting with an external Script running within the webpage external to the frame in order to cause the external Script to modify the updateable object without refreshing the web page.

20. The system of claim 16, wherein the updated data is generated by a Java servlet executed by the server.

21. The system of claim 16, wherein the frame is an inline frame.